IN THE CLAIMS

1. (Currently amended) A method for preparing a compound of the formula

$$R^2-N$$
 $N-R^1$
 R^3

IV

wherein R¹ denotes alkyl, phenylalkoxy, tosyl, benzoyl, or formyl; R² denotes alkyl, alkoxy, phenyl, phenyloxy or phenylalkoxy; and R³ denotes alkyl, alkoxy, phenyl, phenyloxy or phenylalkoxy,

comprising the step of reacting a compound of the formula

$$R^2-N$$
 R^5
 R^3

V

wherein R² and R³ are as defined above and R⁴ and R⁵ are independently selected from the group consisting of fluoro, chloro, bromo and iodo,

with a compound of the formula H₂N-R¹, wherein R¹ is as defined above.

- 2. (Currently amended) The method of claim 1, wherein R¹ is selected from the group consisting of aryl, acetyl, formyl, benzoyl, amine and tosyl.
- 3. (Original) The method of claim 2, wherein R¹ is tosyl.
- 4. (Original) The method of claim 1, wherein R² is methyl.
- 5. (Original) The method of claim 1, wherein R³ is phenyl.

- 6. (Original) The method of claim 1, wherein R⁴ is chloro.
- 7. (Original) The method of claim 1, wherein R⁵ is chloro.
- 8. (Original) The method of claim 1, wherein the reaction is performed in a solvent selected from the group consisting of DMF, DMAC, ethers, ethyleneglycol dimethyl ether, diethyleneglycol dimethyl ether, propyleneglycol dimethyl ether, DMSO, xylene, benzene, ethylbenzene, acetonitrile and toluene.
- 9. (Original) The method of claim 8, wherein said solvent is DMF.
- 10. (Original) The method of claim 1, further comprising the step of adding a strong base.
- 11. (Original) The method of claim 10, wherein said strong base is selected from the group consisting of sodium hydroxide, sodium hydride, potassium hydroxide, potassium hydride, sodium methoxide and sodium amide.
- 12. (Original) The method of claim 11, wherein the base is sodium hydroxide.
- 13. (Original) The method of claim 11, wherein the base is sodium hydride.
- 14. (Original) The method of claim 1, further comprising the step of removing R¹ by hydrolysis.
- 15. (Original) The method of claim 14, wherein R¹ is removed by hydrolysis using a strong acid.
- 16. (Original) The method of claim 15, wherein the acid is selected from the group consisting of sulfuric acid, hydrochloric acid, phosphoric acid and p-toluene sulfonic acid.
- 17. (Original) The method of claim 16, wherein the acid is sulfuric acid.
- 18. (Original) The method of claim 17 wherein the sulfuric acid has a concentration of about 98%.
- 19-36. (Currently cancelled)
- 37-48. (Previously cancelled)

49. (Currently amended) A compound of the formula:

$$R^2-N$$
 $N-R^1$
 R^3

IV

wherein R¹ denotes alkyl, tosyl, formyl, or benzoyl; R² denotes alkyl, alkoxy, phenyl, phenyloxy or phenylalkoxy; and R³ denotes alkyl, alkoxy, aryl, aryloxy or arylalkoxy <u>phenyl, phenyloxy or phenylalkoxy</u>.

- 50. (Previously cancelled)
- 51. (Previously added) The method of claim 1, wherein R² is alkyl.
- 52. (Currently amended) The method of claim 1, wherein R³ is aryl phenyl.
- 53. (Previously amended) The method of claim 1, wherein R¹ denotes tosyl; R² is alkyl, phenyl, phenyloxy or phenylalkoxy; and R³ is phenyl or alkyl.
- (Currently amended) The method of claim 1, wherein R¹ denotes alkyl, tosyl, formyl, or benzoyl; R² is alkyl; and R³ is phenyl. may be cold for paral (Currently amended) The method of claim 1, wherein R¹ denotes tosyl; R² is alkyl; and R³ is aryl phenyl.
 - 56. (Currently cancelled)
 - 57. (Currently cancelled)
 - 58. (Currently amended) The compound of claim 49, wherein R¹ is alkyl, formyl, benzoyl, or tosyl; and R³ is alkyl, alkoxy, phenyl, phenyloxy or phenylalkoxy.
 - 59. (Previously added) The compound of claim 49, wherein R² is alkyl.
 - 60. (Previously added) The compound of claim 49, wherein R² is methyl.
 - 61. (Currently cancelled)
 - 62. (Previously added) The compound of claim 49, wherein R³ is phenyl.
 - 63. (Previously amended) The compound of claim 58, wherein R¹ denotes tosyl; R² is alkyl; and R³ is phenyl.

- 64. (Previously cancelled)
- 65. (Currently cancelled)
- 66. (Previously cancelled)
- 67. (Previously cancelled)
- (New) A method for preparing 4-methyl-2-phenylpiperazine comprising hydrolyzing the compound of claim 49.
- 69. (New) The method of claim 68, wherein the acid is sulfuric acid.
- 70. (New) A method for preparing 3-cyano-2-(4-methyl-2-phenyl-1-piperazynyl) pyridine comprising:

hydrolyzing the compound of claim 49 to form 4-methyl-2-phenylpiperazine; and reacting 4-methyl-2-phenylpiperazine with a 3-cyano-pyridine to form 3-cyano-2-(4-methyl-2-phenyl-1-piperazynyl) pyridine.

71. (New) A method for preparing mirtazapine comprising the steps of:

hydrolyzing the compound of claim 49 to form 4-methyl-2-phenylpiperazine;

reacting 4-methyl-2-phenylpiperazine with a 3-cyano-pyridine to form 3-cyano-2
(4-methyl-2-phenyl-1-piperazynyl) pyridine;

converting 3-cyano-2-(4-methyl-2-phenyl-1-piperazynyl) pyridine to 3-carboxy-2-(4-methyl-2-phenyl-1-piperazynyl) pyridine; and

converting 3-carboxy-2-(4-methyl-2-phenyl-1-piperazynyl) pyridine to mirtazapine.